

What is claimed is:

- 10024025-122101
- 5 1. A method of synchronising at least one receiver module, in particular a receiver module in a telecommunications network or in a network device of a telecommunications network, comprising the steps of:
 - sending at least one first clock signal and a second
 - 10 clock signal to the at least one receiver module,
 - sending at least one item of master-slave-status information about the at least one first clock signal and/or the second clock signal to the at least one receiver module, and
 - 15 - selecting, as a function of the item of master-slave-status information, at the at least one receiver module the first clock signal or the second clock signal as master synchronisation signal for its synchronisation.
 - 20 2. A method according to Claim 1, wherein the at least one first clock signal or the second clock signal is defined as a preferred master synchronisation signal, and wherein the at least one receiver module selects as master synchronisation signal the at least one first clock signal
 - 25 or second clock signal which is defined as preferred master synchronisation signal when the at least one first clock signal or second clock signal to be selected as master synchronisation signal cannot be detected on the basis of the at least one item of master-slave-status
 - 30 information, in particular because the item of master-slave-status information is not sent, or is faultily sent, to the at least one receiver module, or the at least one item of master-slave-status information identifies both the at least one clock signal and the second clock signal
 - 35 as master synchronisation signal.

3. A method according to Claim 1, wherein the at least one first clock signal is generated by a first clock generator module and the second clock signal is generated by a second clock generator module, wherein at least the first clock generator module sends the second clock generator module a synchronisation signal provided in particular for its synchronisation, and wherein the at least one item of master-slave-status information defines the first clock signal as master synchronisation signal for such time as the second clock generator module receives the synchronisation signal.
4. A method according to Claim 3, wherein the at least one item of master-slave-status information defines the at least one first clock signal and the second clock signal as master synchronisation signal when the second clock generator module does not receive the synchronisation signal.
5. A method according to Claim 1, wherein the at least one item of master-slave-status information is contained at least partially in the first clock signal and/or at least partially in the second clock signal.
6. A method according to Claim 1, wherein the at least one first clock signal is sent on a first clock line, and the second clock signal on a second clock line, to the at least one receiver module.
7. A method according to Claim 1, wherein the at least one first clock signal and/or the second clock signal and/or an item of control information assigned thereto contains at least one item of source information from which the at least one receiver module can determine the source from which the at least one first clock signal and the second clock signal emanates, in particular that the

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first clock generator module and the second clock generator module add the respective items of source information, by which they are identified, to the at least one first clock signal and the second clock signal, respectively.

8. A method according to Claim 1, wherein the at least one receiver module is sent at least one third clock signal provided for fine synchronisation, and wherein the at least one receiver module synchronises itself both with the at least one first clock signal or second clock signal selected as master synchronisation signal and also with the at least one third clock signal.
9. A method according to Claim 1, wherein it is performed in a transmission network, in particular with a synchronous digital hierarchy, or in a network device of the transmission network.
10. A method according to Claim 1, wherein, with a first delay means, the at least one first receiver module delays the at least one first clock signal by a predetermined first delay time which in particular corresponds to a maximum expected propagation time difference between the at least one first clock signal and the second clock signal, wherein the at least one receiver module delays the second clock signal in a second delay means, wherein the receiver module determines a phase difference between the at least one first clock signal and the second clock signal, and wherein the receiver module adapts the phase of the second clock signal to the phase of the first clock signal by adjusting the second delay means so that the at least one receiver module can extract the at least one first clock signal and the second clock signal in-phase from the first delay means and from the second delay means respectively.

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11. A synchronisable receiver module, in particular a receiver module in a telecommunications network or in a network device of a telecommunications network comprising receiving means for receiving at least one first clock signal and a second clock signal and comprising selection means for selecting the at least one first clock signal or the second clock signal as master synchronisation signal for its synchronisation, wherein the receiving means are designed to receive at least one item of master-slave-status information about the at least one first clock signal and/or the second clock signal, and wherein the selection means are designed such that as a function of the item of master-slave-status information the receiver module can select the at least one first clock signal or the second clock signal as master synchronisation signal for its synchronisation.
12. A clock generator module, in particular a clock generator module in a telecommunications network or in a network device of a telecommunications network, for synchronising at least one receiver module, with clock generation means for generating at least one first clock signal and with transmitting means for transmitting the at least one first clock signal to the at least one receiver module, wherein the transmitting means are designed to transmit at least one item of master-slave-status information about the at least one clock signal so that as a function of the master-slave-status information the at least one receiver module can select the at least one first clock signal or a second clock signal as master synchronisation signal for its synchronisation.
13. A clock generator module according to Claim 12, wherein the transmitting means are designed to transmit a synchronisation signal which is provided in particular for

the synchronisation of a second clock generator module,
and/or wherein the first clock generator module comprises
receiving means for receiving a synchronisation signal,
provided in particular for its synchronisation, from a
5 second clock generator module, and wherein the
transmitting means are designed such that on the basis of
the at least one item of master-slave-status information
(MSX) they define the at least one clock signal as master
synchronisation signal for such time as the first clock
10 generator module receives the synchronisation signal.

14. A receiver module according to Claim 11, comprising a
program code which can be executed by a control means of a
network device, in particular by a control means on a
15 console of a network device for a transmission network
with a synchronous digital hierarchy.

15. A clock generator module according to Claim 12,
comprising a program code which can be executed by a
20 control means of a network device, in particular by a
control means on a console of a network device for a
transmission network with a synchronous digital hierarchy.

16. A memory means, in particular a floppy disc, CD-ROM,
25 digital versatile disc, hard-disc drive or the like, with
a receiver module according to Claim 14 stored thereon,
and/or with a clock generator module according to Claim 15
stored thereon.

30 17. A network device, in particular a network device for a
transmission network with a synchronous digital hierarchy,
with at least one receiver module according to Claim 11
and/or Claim 14, and/or with at least one clock generator
module according to Claim 12 and/or Claim 15.